APPLICATION SERIAL NO. 08/196,154
Docket No.43016-A-PCT-US

Proposed Amended Claims

--119. (Currently amended) A composition which comprises:

a) a conjugate ~~comprising~~ of (i) a GM2 ganglioside derivative which comprises an unaltered oligosaccharide part and an altered ceramide portion comprising an altered sphingosine base and (ii) Keyhole Limpet Hemocyanin;

b) QS-21, a saponin derivable from the bark of a Quillaja saponaria Molina tree; and

c) a pharmaceutically acceptable carrier;

wherein the amount of the conjugated GM2 ganglioside derivative is an amount between about 1µg and about 200 µg, the amount of the saponin is an amount between about 10 µg and about 200 µg, and the GM2:Keyhole Limpet Hemocyanin molar ratio is from 200:1 to 1400:1, the relative amounts of such conjugate and such saponin being effective to stimulate or enhance production in a subject of an antibody to GM2,

wherein in the conjugate the ganglioside derivative is covalently bound to the Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base of the altered ceramide portion of the ganglioside

derivative and the nitrogen of an ε-aminolysyl group of Keyhole Limpet Hemocyanin. --

Claims 120-125 (Cancelled).

--126. (Currently amended) The composition of claim [[125]] 119 wherein the amount of the saponin is about 100 µg. --

--127. (Currently amended) The composition of claim [[125]] 119 wherein the amount of the saponin is about 200 µg. -

Claim 128 (Cancelled).

--129. (Currently amended) The [[A]] composition of claim 119 which comprises:

a) a conjugate ~~comprising~~ of (i) a GM2 ganglioside derivative which comprises an unaltered oligosaccharide part and an altered ceramide portion comprising an altered sphingosine base and (ii) Keyhole Limpet Hemocyanin;
b) QS-21, a saponin derivable from the bark of a Quillaja saponaria Molina tree, ~~wherein the saponin is QS-21~~; and
c) a pharmaceutically acceptable carrier;

wherein the conjugated GM2 ganglioside derivative is present in an amount between about ~~10 µg and about 50 µg~~ 1 µg and about 200 µg, the amount of the saponin is about 100 µg and the GM2:Keyhole Limpet Hemocyanin molar ratio is from 200:1 to 1400:1, where the amount of such conjugate and

such saponin is effective to stimulate or enhance production in a subject of an antibody to GM2;

and wherein in the conjugate the ganglioside derivative is covalently bound to the Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base of the altered ceramide portion of the ganglioside derivative and the nitrogen of an ε-aminolysyl group of Keyhole Limpet Hemocyanin. --

--130. (Previously presented) A method of treating a subject afflicted with melanoma which comprises administering to said subject an amount of the composition of claim 129 effective to stimulate or enhance production in a subject of an antibody to GM2 and to thereby treat said melanoma in said subject. --

--131. (Currently amended) A method of stimulating or enhancing production of an antibody directed to GM2 in a subject which comprises administering to the subject an effective amount of a composition which comprises:

a) a conjugate ~~comprising~~ <u>of</u> (i) a GM2 ganglioside derivative which comprises an unaltered oligosaccharide part and an altered ceramide portion comprising an altered sphingosine base and (ii) Keyhole Limpet Hemocyanin;
b) <u>QS-21,</u> a saponin derivable from the bark of a Quillaja saponaria Molina tree; and
c) a pharmaceutically acceptable carrier;

wherein the amount of the conjugated GM2 ganglioside derivative is an amount between about 1 μg and about 200 μg, the amount of the saponin is an amount between about 10 μg and about 200 μg, and the GM2:Keyhole Limpet Hemocyanin molar ratio is from 200:1 to 1400:1, the relative amounts of such conjugate and such saponin being effective to stimulate or enhance production in a subject of an antibody directed to GM2,

wherein in the conjugate the ganglioside derivative is covalently bound to the Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base of the altered ceramide portion of the ganglioside derivative and the nitrogen of an ε-aminolysyl group of Keyhole Limpet Hemocyanin so as to thereby stimulate or enhance production in said subject of the antibody directed to GM2. --

--132. (Currently amended) A method of treating a human subject having cancer ~~cancer in a subject~~ which comprises administering to the subject an effective ~~cancer treating~~ amount of a composition which comprises:

a) a conjugate ~~comprising~~ of (i) a GM2 ganglioside derivative which comprises an unaltered oligosaccharide part and an altered ceramide portion comprising an altered sphingosine base and (ii) Keyhole Limpet Hemocyanin;
b) QS-21, a saponin derivable from the bark of a Quillaja saponaria Molina tree; and
c) a pharmaceutically acceptable carrier;

wherein the amount of the conjugated GM2 ganglioside derivative is an amount between about 1μg and about 200 μg, the amount of the saponin is an amount between about 10 μg and about 200 μg, and the GM2:Keyhole Limpet Hemocyanin molar ratio is from 200:1 to 1400:1, the relative amounts of such conjugate and such saponin being effective to stimulate or enhance production in a subject of an antibody to GM2,

wherein in the conjugate the ganglioside derivative is covalently bound to the Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base of the altered ceramide portion of the ganglioside derivative and the nitrogen of an ε-aminolysyl group of Keyhole Limpet Hemocyanin so as to stimulate or enhance production in the subject of the antibody to GM2 and thereby treat the ~~cancer in the~~ subject.

--133. (Previously presented) The method of claim 132, wherein the cancer is of epithelial origin. --

--134. (Previously presented) The method of claim 132, wherein the cancer is of neuroectodermal origin. --

--135. (Previously presented) The method of claim 134, wherein the cancer of neuroectodermal origin is a melanoma.--

--136. (Previously presented) The method of claim 131 or 132, wherein the administering is effected at two or more sites. --

--137. (Previously presented) The method of claim 136, wherein the administering is effected at three sites. --

--138. (Previously presented) The method of claim 131 or 132, wherein the composition is administered subcutaneously to said subject.--

--139. (Previously presented) The method of claim 138, wherein the composition is administered to said subject at two-week intervals.--

--140. (Previously presented) The method of claim 138, wherein the composition is initially administered to said subject at weekly intervals. --

--141. (Previously presented) The method of claim 131 or 132, wherein the composition to be administered is prepared prior to administration to the subject by mixing the conjugate and the saponin.--

--142. (Previously presented) The method of claim 141, wherein the conjugate and the saponin are mixed on the day of administration to the subject. -

Claim 143 (Cancelled).